DISTRICT OF RHODE ISLAND	v
WANDA OVALLES, INDIVIDUALLY AND P.P.A A.O., AND WILSON OVALLES,	* : : : :
Plaintiffs,	: Case No. 3:14-CV-137-M-PAS
- against -	: :
SONY ELECTRONICS, INC., BEST BUY CO., INC., FOXCONN INTERNATIONAL, INC., AND JOHN DOE CORPORATIONS 1-4,	: : :
Defendants.	: : :
	X

SUR-REPLY IN OPPOSITION TO PLAINTIFFS' MOTION TO STRIKE OBJECTIONS AND COMPEL SUPPLEMENTAL DISCOVERY RESPONSES FROM SONY ELECTRONICS, INC.

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Defendant Sony Electronics, Inc. ("SEL") respectfully submits this sur-reply memorandum of law in further opposition to "Plaintiffs' Motion to Strike Objections and Compel Supplemental Discovery Responses from [SEL]" (the "Motion to Compel").

PRELIMINARY STATEMENT

As explained in SEL's Memorandum of Law in Opposition to Plaintiffs' Motion to Compel, plaintiffs' moving papers did not make the "threshold showing of relevance" necessary to justify their requests for sweepingly broad discovery about Sony VAIO notebook models or products other than the VAIO Model VPC-EB at issue in this case. In particular, SEL pointed out that plaintiffs had not put forward any evidence to show how the Model VPC-EB at issue was supposedly defective, let alone any evidence to show the extent to which other VAIO models shared characteristics pertinent to any such alleged defect.

Plaintiffs asserted for the first time in their Reply Memorandum in support of their Motion to Compel, without any evidentiary support, that "the lithium ion cells in the battery experienced thermal runaway." (*See* Plaintiffs' Reply at 6). Apparently, plaintiffs' argument is that all VAIO notebook models are defective in the same (still unspecified) way simply because they all contain lithium ion batteries.

SEL respectfully submits this Sur-Reply Memorandum and the accompanying Declaration of Robert McCaul to put before the Court additional evidence and authority to show that, even with respect to lithium ion battery cells *alone*, the battery cells in the VAIO Model VPC-EB notebook computer at issue are not "substantially similar" to battery cells pre-dating the 2010 manufacture date of the VAIO model and battery cells at issue.¹

¹ In Wilson Ovalles Int. No. 25, plaintiffs ask SEL to "identify in detail all battery cell failures and protection circuit failures" of any kind with respect to any VAIO model going back to the year 2000.

The battery cells in the plaintiffs' Notebook were model G6G cells manufactured by Sony Energy Devices Corp. ("SEND"). G6G cells did not go into production for use by consumers until the first half of 2010 at the earliest. But by the end of 2008, SEND had implemented material changes to the design of all of its lithium ion cells, and hundreds of material changes to the manufacturing process of those cells. Those design and manufacturing process changes were already in place before the manufacture of G6G cells and the plaintiffs' Notebook in 2010. G6G cells have never been subject to any recall.

As a matter of fact and law, as set forth below and in plaintiffs' prior opposition papers, the G6G battery cells in plaintiffs' Notebook were not "substantially similar" to other battery cells, much less similar in any of the other respects relevant to heat generation or heat mitigation addressed in our opposition papers. Plaintiffs' demand for "all battery cell failures and protection circuit failures" of any kind, in any circumstances, going all the way back to the year 2000 is an egregious overreach that should not be indulged.

STATEMENT OF ADDITIONAL FACTS

SEL had previously described marked dissimilarities between the cells in the plaintiffs' Notebook (the G6G model) and other types of cells with respect to chemical composition, capacity, charging current, dimensions of positive and negative electrodes, and the manufacturer of the cell protection mechanism. (Koningsor Decl. ¶¶26-27). The accompanying Declaration of Robert McCaul, an SEL Sales & Marketing Director for Sony energy products, explains that the G6G battery cells in the plaintiffs' Notebook did not go into production for use by consumers until the first half of 2010. (McCaul Decl. ¶15). By this date, SEND had introduced hundreds of changes to the design and manufacture of its battery cells to reduce the

chances of internal short-circuiting caused by metal particulate contamination, as described below. (*Id.* ¶¶4, 6, 12, Ex. A at 78-92).²

At the most general level, SEND, the manufacturer of the batteries sold by SEL, manufactured cylindrical lithium ion battery cells as follows: *First*, large rolls of electrode material are manufactured – one roll for the cathode layer of the cell, and one roll for the anode layer of the cell. These rolls are manufactured by mixing together raw materials into an active mixture and then coating that active mixture onto either aluminum foil (for the cathode) or onto copper foil (for the anode). *Second*, the rolls of electrode material are cut into small strips. *Third*, the small strips of electrode material are wound together, along with an insulating layer (called the separator) between the cathode layer and the anode layer. *Fourth*, the wound up roll is placed in a small, cylindrical metal can, which is then filled with electrolyte. And *fifth*, a cap is used to seal the cell. Cells are then shipped to a factory where they are used to make a battery pack. (As a general matter, a battery pack is comprised of battery cells, electronics that manage the cells, plastic housing, and terminals). (*Id.* ¶3).

SEND implemented the following changes to the design of battery cells *before*G6G cells were first made for consumer use in 2010 (*id*. ¶¶13, 15):

• SEND introduced a higher strength separator to separate the cathode layer of the battery from the anode layer of the battery. The separator is necessary to prevent the cathode layer and the anode layer from coming into contact and causing the battery to short circuit. The higher strength separator reduced the chance that a hard metallic contaminant particle could puncture the separator and lead to such a short circuit. (*Id.* ¶8).

² As described in Mr. McCaul's Declaration, in preparation for SEL's meetings with Dell (one of its customers), SEL developed materials that described many of the cell design and manufacturing changes that SEND had implemented to address the metal particulate contamination issue. While these materials were prepared specifically for Dell, the design and manufacturing changes described apply to *all* cylindrical lithium ion cells later produced by SEND – whether they be in use for Dell, Sony VAIO, or other manufacturer's laptop computers. (*Id.* ¶5).

- SEND introduced a laminated contamination block system to the design of the cells it manufactured. This system laminates the sides of the separator in place. The anode and cathode plates are sandwiched between the layers of the separator. By sealing the sides of separator, it physically blocks contaminants from entering the cell. (*Id.* ¶9).
- SEND altered the cell design to add protection taping to the cathode layer of the cell. In the event that any metal particles managed to enter the cell, they would migrate to the end of the roll of electrode. The protection taping was added as a precaution to further prevent a contaminant particle from puncturing the separator and causing a short circuit. (*Id.* ¶10).
- SEND changed the composition of the anode tab at the bottom of the cell from nickel to copper. That design change was made because, when the anode tab is spot welded into place, miniscule metal particles can dislodge and contaminate the cell. While nickel particles have a shape like a jagged rock and could conceivably puncture the separator, a copper particle has a smooth shape that, if it contaminated the cell, would not puncture the separator. (*Id.* ¶11).

In addition to those design changes, SEND implemented hundreds of improvements to the cell manufacturing process. (*Id.* ¶12 and Ex. A). For example:

- SEND added a high density magnetic filter that functioned like a magnetized colander to trap any microscopic metallic particles in the active mixture applied to the anode and cathode layers of the cell. (Id. $\P12(i)$).
- SEND changed the design of the rack units that hold the rolls of electrode material to eliminate metal flanges that created a risk of friction between the electrode material and the flanges or rack. The new racks had shelfs made of plastic in areas proximate to the electrode material, and the width between the flanges was increased to eliminate the risk that the electrode material would rub against the flange. (*Id.* ¶12(ii)).

- SEND added a real-time pressure monitor for the vacuum used to suck away any metal particles created during the process of ultrasonically welding the cap onto the battery cell. (*Id.* ¶12(iii)).
- SEND placed a plastic shield over the conveyers on which the rolls of battery material travel during the manufacturing process to prevent particulate contamination, and, for the same reasons, added a shield when the top cap of the cell is welded to the battery cell. (*Id.* ¶12(iv)).

These substantial changes to battery cell design and manufacturing processes were implemented by the end of 2008. (*Id.* ¶13).

Plaintiffs are likely to contend that a 2006 VAIO recall of lithium ion battery cells manufactured by SEND is somehow relevant to the G6G cells in plaintiffs' Notebook. That 2006 recall involved G7 and G8 cells that are not at issue in this case. Plaintiffs have made no showing that the cells involved in that recall were substantially similar in any way to the G6G cells in plaintiffs' Notebook. Indeed, that recall involved battery packs that were sold between 2004 and 2006 (*see* Plaintiffs' Ex. 19), years before the manufacture of the G6G cells in 2010 and the completion in 2008 of substantial design and manufacturing changes implemented by SEND.

³ The three other recalls noted in Plaintiffs' Exhibit 19 did not involve Sony batteries at all: The Sept. 4, 2008 recall of certain VAIO notebooks involved "irregularly positioned wires near the computer's hinge and/or a dislodged screw inside the hinge." The June 30, 2010 recall of certain VAIO notebooks involved BIOS firmware (*i.e.*, the operating system that controls the booting process). And, the July 1, 2014 recall of a particular VAIO model involved only a *Panasonic* battery and not any battery manufactured by SEND or sold by SEL. These recalls have nothing to do with Sony lithium-ion batteries.

ARGUMENT

I.

PLAINTIFFS HAVE NOT IDENTIFIED ANY INJURY-CAUSING DEFECT IN G6G CELLS, LET ALONE ANY SUBSTANTIALLY SIMILAR DEFECT IN ANY OTHER LITHIUM ION CELLS

Plaintiffs' assertion in their reply brief that an unspecified failure in the lithium ion battery of their VAIO VPC-EB Notebook caused thermal runaway does not constitute the necessary threshold evidentiary showing that such cells were "substantially similar" to all other lithium ion battery cells. Indeed, there were substantial *dissimilarities* between the G6G cells in plaintiffs' Notebook manufactured in 2010 and the cells that were produced in any earlier time period before the implementation of significant design and manufacturing process changes that were completed by the end of 2008.

First and foremost, plaintiffs have still failed to present any evidence identifying the particular alleged battery failure. Without evidentiary support from any engineer or other expert, plaintiffs attached to their reply brief an academic paper stating that lithium ion batteries can fail for a variety of reasons. However, plaintiffs made no attempt to specify the alleged defect with respect to the cells in plaintiffs' Notebook. (*See* Defendants' Opp. Br. at 16-19). Correspondingly, plaintiffs have still failed to show the extent to which the battery cells in any other VAIO model have the same allegedly defective characteristic as the cells in the plaintiffs' Notebook. (*See id.*). Plaintiffs have not linked in any way the academic paper they cite to the cells in plaintiffs' own Notebook or to the cells in any other VAIO model.

Plaintiffs' argument reduces to the contention in a lawyers' brief, unsubstantiated by any evidence, that all VAIO notebooks using lithium ion batteries are defective in some unspecified way, and therefore they are all substantially similar. As the cases cited in SEL's opposing brief make clear, it was plaintiffs' threshold burden to descend beyond conclusory

generalities and come forward with *evidence* of the particular defect they allege with respect to the plaintiffs' Notebook, and *evidence* showing the extent to which other VAIO notebooks have the same injury-causing characteristic. (*Id.* at 16-19). This, they have failed to do.

Second, beyond plaintiffs' failure to make the requisite threshold evidentiary showing, SEL has submitted evidence demonstrating that the design and manufacture of the G6G battery cells in plaintiffs' Notebook were different in material respects from the design of cells manufactured before the end of 2008. The G6G cells did not go into production until 2010. They had a higher strength separator between the anode and cathode layers, a laminated contamination block system, added protection taping to the cathode layer of the cell, and an anode tab made out of copper rather than nickel. In addition to the design improvements, the G6G cells were produced according to a manufacturing process that had implemented hundreds of improvements designed to address and reduce the risk of contamination for safety and quality control purposes.

SEL's evidence of the changes to the design and manufacturing process of the G6G cells manufactured in 2010 compels the conclusion that the G6G cells were not substantially similar to the cells manufactured and sold prior to the end of 2008. In view of the many dissimilarities between VAIO models, battery packs, and battery cells, plaintiffs' motion to compel with respect to Wilson Ovalles Int. No. 25 should be denied because plaintiffs are not entitled to discovery concerning all VAIO models going back to the year 2000. Indeed, plaintiffs have not shown the relevance of discovery concerning any VAIO model other than the Model VPC-EB Notebook at issue in this lawsuit.

Plaintiffs are likely to contend that a 2006 VAIO recall involving G7 and G8 lithium ion battery cells is somehow relevant to the G6G cells in plaintiffs' Notebook. The

following cases illustrate that the mere fact of a recall of a product model other than the product at issue is irrelevant, absent an evidentiary showing of substantial similarity:

In Allstate Ins. Co. v. Hewlett-Packard Co., No. 8:08CV39, 2010 WL 2813659 (D. Neb. July 16, 2010), the plaintiff insurance carrier brought a subrogation action for property damages resulting from a 2006 fire at the home of its insureds. The insurer contended that a cell failure in the lithium ion battery pack of a notebook computer manufactured by the defendant started the fire. Id. at *1. Between 2005 and 2010, the defendant had instituted five recalls of certain lithium ion batteries used in its notebooks due to fire hazards. *Id.* at *1 n.1. The plaintiff served discovery requests seeking documents relating to certain CPSC announced recalls of lithium ion batteries, to which the defendant objected on relevance grounds. *Id.* at *1. The plaintiff moved to compel production, arguing that the requested documents "relate to lithium ion battery failures that involve HP laptop computers," and "will allow Plaintiff to compare the lithium ion battery failure in this case with other cases where HP has admitted a problem." Id. at *2. The court denied the motion, finding that the plaintiff failed to make a threshold showing of relevance for the CPSC documents. Id. The court noted that "the requested documents relate to recalls that involved a different model of computer and battery pack than the computer at issue." Id. In particular, the court noted that "the battery pack at issue in this case has a different manufacturer, cell components, and cell manufacturer lot than the batteries involved with the previous recalls, and plaintiff has not shown that the subject battery was manufactured at the same time as the recalled batteries." Id.

Similarly, in *Tolstih v. L.G. Electronics, USA, Inc.*, No. 2:07-cv-582, 2009 WL 439564 (S.D. Ohio Feb. 20, 2009), the plaintiff alleged that a Model LD40 dehumidifier manufactured and/or distributed by the defendants was defective and caused a fire resulting in a

death and injuries. In 2001, several dehumidifier models were the subject of a recall, and, after the recall, the design of the dehumidifiers was modified to reduce the possibility of overheating. *Id.* at *6. The Model LD40, which was the subject of the litigation, was manufactured in 2004, and had a different design than the recalled units and those manufactured prior to 2004. *Id.* The plaintiff moved to compel discovery regarding "any" dehumidifier sold between 1999 and 2007, arguing that they "likely" had a similar design defect. *Id.* at *4, 7. The court rejected the plaintiff's argument as "over-broad and overly simplistic," noting that the differences between the recalled models, pre-2004 units and different size capacity models were "many and significant." *Id.* The court limited discovery to the Model LD40 and five other models that had the same capacity, watts, running current, energy factor, refrigerant type, compressor model, capacitor, and motor assembly. *Id.*

Here, as in *Allstate* and *Tolstih*, plaintiffs have failed to submit evidence that would constitute a threshold showing of relevance with respect to any computer, battery pack, or cell model other than the Notebook at issue. Here, as in *Allstate*, the G7 and G8 batteries that were the subject of a 2006 recall involved different models of computers, different battery packs, and different cells than the plaintiffs' Notebook. And here, as in *Tolstih*, the battery cell manufacturer made significant changes in the design and manufacturing process to reduce the risk of a short circuit.

The G6G cells in the plaintiffs' Notebook have a different design from the cells produced prior to the modifications to address metal contamination, and were manufactured under dramatically different conditions than those cells. Plaintiffs' contention that all VAIO models are substantially similar simply because they all have lithium ion batteries is conclusory, unsupported by any evidence, and belied by the evidence of the "many and significant"

differences between the G6G cells in plaintiffs' Notebook, and the innumerable other cell types in VAIO models going back to the year 2000 that would be encompassed by Wilson Ovalles Int. No. 25.4

CONCLUSION

For the reasons set forth above and its Opposition brief, SEL respectfully submits that Plaintiffs' motion to strike objections and compel supplemental discovery responses should be denied.

Dated: March 14, 2016

Respectfully Submitted,

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⁴ Plaintiffs' Second Set of Requests for Production of Documents, which contains many requests for documents relating to recalls of other models of VAIOs and batteries going back many years before the manufacture of the Plaintiffs' Notebook is likely to raise similar issues.

CERTIFICATE OF SERVICE

I, John F. Kelleher, certify that on the 14th day of March, 2016, a true copy of the within was filed electronically and it is available for viewing and downloading from the ECF system. Counsel of record received notice of the filing of this document electronically from the United States District Court for the District of Rhode Island.

/s/ John F. Kelleher